User Manual

ioSafe® Rugged Portable

- HDD or SSD
- · Solid Billet Aluminum or Titanium
- Data Recovery Service (DRS)
- No-Hassle™ Warranty

Rated to protect data against:

- Drop
- Crush
- Salt Water
- Sand
- Rain
- High Altitude
- Chemicals



Contents

Welcome	4
Package Contents	9
Specifications	10
System Requirements	13
Precautions	13
About USB and FireWire	16
Securing the ioSafe Rugged Portable (Suggestions)	17
Backup and Encryption Software	18
Connecting the ioSafe Rugged Portable	19
Formatting for Mac OS	21
ioSafe Data Recovery Service	22
Data Recovery Procedure	24
ioSafe No-Hassle Warranty	26
ioSafe Contact Information	27

Welcome

Thank you for purchasing the ioSafe® Rugged Portable external hard drive – the Go-Anywhere™ storage solution that does more to protect your data than any other portable hard drive. For years, ioSafe has continued to set the standard for disaster proof hardware. The ioSafe Rugged Portable delivers an unprecedented combination of security, reliability, mobility and price.

Your ioSafe Rugged Portable is covered under ioSafe's No-HassleTM Warranty and Data Recovery Service (DRS). Customers may elect to either have the drive repaired or data recovered. Standard warranty and DRS term is one (1) year. Both the warranty and DRS are upgradeable to 3 and 5 years. Visit www.iosafe.com for more details on the warranty and DRS.

The ioSafe Rugged Portable comes in hard disk drive (HDD), solid state drive (SSD), aluminum (Al) and titanium (Ti) versions. All have been rigorously tested to protect the data contained in the device to meet the following specifications:

Drop / Shock: Protects data against loss from 20' drops (SSD versions) and 10' drops (HDD versions) per MIL-STD-810G Method 516.5 (1TB HDD version requires optional Rugged Portable skin included with 1TB purchase)

Water Immersion: Protects data against loss from full immersion in fresh or salt water for up to a 10' depth up to 3 days (Al versions) and a 30' depth for up to 3 days (Ti versions) per IP68. No cap is required over the connector to retain data

protection. Water protection is maintained even if the drive is plugged into a host computer.

Chemical Testing: Protects data against loss when fully immersed in diesel fuel, oils, hydraulic fluids, aircraft fuels, 12" depth for 1 hour per MIL-STD-810G Method 504

Extreme Environment Testing: Protects data against loss from continuous exposure to UV, blowing sand, blowing dust, rain, salt fog, icing or freezing rain, 24 hours per MIL-STD-810G Methods 505.4, 506.4, 509.4 and 510

Altitude Protection: Protects data against loss from high altitude operation to 15K ft. (HDD versions) and 30K ft. (SSD and Ti versions) per MIL-STD-810G Method 500.4

Crush: Crush resistant to 2500 lbs (Al version) and 5000 lbs (Ti version).

Theft: Kensington® Lock Slot compatible - solid metal lock slot construction.

NOTE: Please read this User Manual and retain it for future reference.

Copyrights

Copyright ioSafe, Inc. 2011. All rights reserved. No part of this publication may be reproduced or transmitted in any form by any means, electronic, mechanical photocopying, recording or otherwise, without prior written consent.

Trademarks

All Trademarks mentioned or appearing in this document are the property of their respective owners.

Federal Communication Commission (FCC)

Radio Frequency Interference Statement

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance may void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to

provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- · Increase the separation between equipment and receiver
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/television technician for help
- Use a shielded and properly grounded I/O cable and power cable to ensure compliance of this unit to the specified limits of the rules

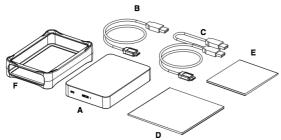
CE Compliance For Europe

Marking by the CE symbol indicates compliance of this system to the applicable Council Directives of the European Union, including the EMC Directive (2004/108/EC) and the Low Voltage Directive (2006/95/EC). A "Declaration of Conformity" in accordance with the applicable directives has been made and is on file at ioSafe, Inc.

Changes

The material in this document is for information only and subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, no liability resulting from errors or omissions in the document, or form the use of the information contained herein is assumed. The publisher reserves the right to make changes or revisions without reservation and without obligation to notify any person of such revisions and changes.

Package Contents



Included in the package:

- A. ioSafe Rugged Portable (USB 3.0 version shown)
- B. USB 3.0 cable (compatible with USB 2.0) or FireWire 800 cable
- C. USB 2.0 Y cable (for low powered USB 2.0 ports)
- D. Users guide (This booklet)
- E. DRS Activation Notice
- F. Optional Elastomeric Skin (Included with all 1TB units to meet drop specifications, ioSafe P/N 370-10987-00)

Specifications

Dimension	s (Inches)3.9"W x 5.7"L x 1.0"H
Weight (Lb	.)
Interface 1	Fransfer Rate
	ISB 3.0up to 5 Gbps
F	ireWire 800up to 800 Mbps
Ambient T	emperature
C	0−35°C
N	lon-operating40°C to 65°C
Humidity	
C	Operating (non-condensing)5% - 80%
N	Ion-operating (fresh or salt water)100%

Drop / Shock (protects from data loss):

Non-operating (SSD Versions)		
per MIL-STD-810G Method 516.5 (1TB HDD version has reduced drop		
capabilities without optional skin, ioSafe P/N 370-10987-00, installed.)		
Chemical Exposure (protects data against loss):		
Full Submersion		
Diesel fuel, oils, hydraulic fluids, aircraft fuels, 12" depth for 1 hour per		
MIL-STD-810G Method 504. No cap is required over the connector to retain		
data protection. Protection is maintained even if the drive is plugged into a		
host computer.		
Extreme Environment Exposure (protects data against loss):		
Continuous exposure to UV, blowing sand, blowing dust, rain, salt fog, icing		
or freezing rain, 24 hours per MIL-STD-810G Methods 505.4, 506.4, 509.4		
and 510.		
High Altitude (protects data against loss):		
Hard Disk Drive (HDD) Versions15,000 ft. Altitude		
Solid State Drive (SSD) Versions		
Operates per MIL-STD-810G Method 500.4		

Crush (protects data against loss):

Theft:

Kensington® Lock Slot compatible - solid metal lock slot construction.

System Requirements

For Windows: The ioSafe Rugged Portable USB 3.0 version is formatted with an NTFS file system, the default for Windows operating systems.

For Mac: The ioSafe Rugged Portable FireWire 800 for Mac is pre-formatted and supported on Mac's using the G3 (or later) or Intel processor. When connecting a USB 3.0 version of the ioSafe Rugged Portable to a Mac, the drive will need to be reformatted once connected as this device is originally formatted for Windows PC users and has an NTFS file system format. See page 21 – Formatting the USB 3.0 ioSafe Rugged Portable for Mac OS.

Precautions

Please read the precautions listed below. Failure to do so may result in damage to the device and loss of data. All drives covered under ioSafe's Data Recovery Service would qualify for data recovery for any reason under our general terms and conditions for the service. See our website for more details.

We strongly recommend that you keep multiple copies of all your data on multiple
devices. At least one copy of your data should sit on a fireproof waterproof hard
drive, like the ioSafe Solo series, or be offsite at a second location. The ioSafe
Rugged Portable is a great portable backup device that allows you to move data
offsite easily. No matter what the data storage device, keeping redundant copies of

- Avoid bumping, jarring or dropping the ioSafe Rugged Portable HDD while connected to a computer and in use. Mechanical hard disk drives (HDD) are more susceptible to damage while they're operating which sometimes results in data loss. Inside a mechanical hard disk drive is a spinning disk and small read/write drive head that "flies" on a cushion of air above the disk. If the drive head hits the spinning disk, data loss can occur. Solid State Drives (SSD) have no moving parts and do not have a bumping or jarring limitation. If you require that the drive continue to operate while being dropped or during vibration (as present while in an operating vehicle), we highly recommend the ioSafe Rugged Portable SSD for the ultimate in drop and shock protection.
- Do not disconnect any cables while the ioSafe Rugged Portable is powered on without first stopping or ejecting the device through the operating system software interface.
 Disconnecting any drive during a read/write event can cause logical corruption on the drive, both SSD and HDD drives, which can sometimes result in data loss.
- Use proper surge and uninterruptible power supplies (UPS) to guard your computer system against abrupt outage and voltage spikes during brownouts and lightning storms.

Supported OS/interface connection:

Mac OS 10.3 or later	FireWire 800,	USB 3.0,	USB 2.0
Windows 7/ Vista (SP2) / XP (SP3)		USB 3.0,	USB 2.0

Note: Windows Server OS and Linux can sometimes be incompatible with the USB interface and might not be supported.

About USB and FireWire

Actual connection performance depends on many factors including: CPU, file system overhead, number of attached devices and more. Given these and other factors, in day-to-day use you can expect maximum, sustained transfer rates to be less than the theoretical rates maximum rates possible with the connection.

USB 3.0 is backwards compatible with USB 2.0 and 1.1. FireWire 800 is backwards compatible with FireWire 400 with a separate adapter (not included). This means you can generally connect newer devices to older devices. However, interface transfer rates are limited by the interface with the lower speed.

NOTE: The cable supplied with your system has been optimized for performance. Longer cables may not work or only work intermittently.

Some computers or hubs may be underpowered. A USB 2.0 Y cable is included with the ioSafe Rugged Portable if you have trouble with a low powered USB port. Alternatively, you can try a different USB port or try a powered hub.

Securing the ioSafe Rugged Portable

Kensington® Security Slot (USB 3.0 version shown)

For drive security, the ioSafe Rugged Portable is equipped with a Kensington security slot, which supports a standard Kensington security cable (sold separately). For more information on the Kensington security slot and available products, visit www.kensington.com.



Backup and Encryption Software

Backup Software

Upon proper activation of your Data Recovery Service, qualified users can download:

Genie Timeline™ Professional (\$60 Value) Award winning backup software for Windows OS. Simple, block level, open file and OS Continuous Data Protection (CDP) software for Windows users. DRS Activation required at www.iosafe.com to validate purchase prior to downloading software and install code.

Apple® Mac® TimeMachine®— Mac specific ioSafe Rugged Portable drives are already formatted with Mac compatible GUID Partition Table (GPT) formatting. If not, reformatting may be required. Simple instructions are online in the support and FAQ sections at iosafe.com or on page 21 for Mac users who have purchased a NTFS formatted drive and wish to format their drives for a Mac.

Encryption

After DRS Activation, users can optionally download TrueCrypt® AES-256 Encryption Compatible3 - Open source, encryption software. FIPS 140-2, ISO/IEC 10118-3:2004. PC, Mac and Linux compatible.

Connecting the ioSafe Rugged Portable

- Connect. Use any one of the various cables to connect the drive to the computer. Only
 one cable should be used at a time. If connecting to a low powered USB 2.0 port, the
 drive may not have enough power to operate and the USB Y-Cable will be required to be
 used if this is the case.
- Verify that the Drive Mounts. Before storing data on the ioSafe Rugged Portable, the drive must be "mounted" (physically connected and recognized by the OS) to the computers operating system.
- **For Windows PC**, once the ioSafe Rugged Portable is connected, you will see a blue light on the drive and the drive should mount in a few moments. A new drive icon/letter will appear in My Computer/Windows Explorer. You are now ready to use the ioSafe Rugged Portable.
- For Mac, once the ioSafe Rugged Portable for Mac is powered on the operating system should mount the drive in a few moments. A new drive icon will appear on the Desktop and in the Finder. The ioSafe Rugged Portable not specifically made for Macs should be reformatted for the Mac OS (See page 21 Formatting the ioSafe Rugged Portable for Mac OS).
- The ioSafe Rugged Portable is ready to use. Save or drag and drop files to the drive as you would to any other drive attached to your computer.

4. Although Genie Timeline Professional is bundled with the ioSafe Rugged Portable, you are free to use whatever backup software you choose and any commercially available application should work. Genie Timeline Professional is only compatible with Windows OS. We recommend Mac users utilize Time Machine which comes standard on newer Mac OS.

Formatting for Mac OS

The ioSafe Rugged Portable FireWire 800 for Mac is formatted GUID Partion Table (GPT) and ready right out of the box for the Mac. The ioSafe Rugged Portable USB 3.0 is formatted NTFS (for Windows) and may not be recognized by Mac. You may get an alert message which reads: "You have inserted a disk containing no volumes ..." Click the ignore button and follow the steps below.

To format the Rugged Portable USB 3.0 for Mac:

- 1. Save any information currently on the disk you want to keep by moving your data onto a new drive. *Formatting a hard drive erases all the data.*
- 2. Open up the Disk Utility and highlight the drive you'd like to format (The line that contains the HDD size)
- 3. Click on the "Partition" tab
- 4. Click on the dropdown menu where it says "Volume Scheme" and select "1 Partition"
- 5. Click on the "Options" button, select the "Apple Partition Map" option and click "OK"
- 6. Click in the field that allows you to name the volume and type in the value you prefer.
- 7. Verify the volume format is set to "Mac OS Extended (journaled)
- 8. Click "Apply" and then click "Partition" to start the formatting process.

The partitioning process will take from 10 seconds to 2 minutes to complete. Once complete,

ioSafe Data Recovery Service (DRS)

The standard term for the Data Recover Service (DRS) is one (1) year from the date of purchase. Three (3) and Five (5) year upgraded DRS plans are available upon activation.

Terms and Conditions

As applicable during the Data Recovery Service period and upon validated registration of an ioSafe (the Company) product on the Company's website (www.iosafe.com), the Company or its contracted partner will assist the original purchaser for one "data recovery event". The Company will attempt to restore the lost data by employing one of the following ways:

The Company or its contracted partner will provide phone or email based support to assist in recovering the data, or

The Company may pay for the disaster exposed product to be shipped back to the Company's headquarters for data recovery. If data recovery is successful, a replacement product will be loaded with the original data and shipped back to the original user, or

At the discretion of the Company, if the data recovery by the Company is not successful, the Company will pay up to \$2,500 USD (for the HDD version) or \$5,000 USD (for the SSD version) to a third-party data recovery service of the Company's choice to extract the data. Any data extracted will be loaded on a replacement product and shipped back to

the original user. The Company has the right to use a factory refurbished product as the replacement product.

The Company's good faith attempts to restore and recover the data in accordance with these terms and conditions shall be the purchaser's sole and exclusive remedy and the Company shall not be liable for any damages whatsoever. The Company cannot guarantee that any data will be recoverable nor can it guarantee which data files are on the product. Data restoration or recovery shall be strictly limited to whatever files are restorable or recoverable and not what the purchaser believes to exist on the product. Only one instance of a "data recovery event" per product is covered by this program for products registered to the original purchaser only.

Data Recovery Procedure

If the ioSafe Rugged Portable faces possible data loss for any reason, you should immediately call the ioSafe Disaster Response Team at 1–888–984–6723 (US & Canada) or 1–530–820–3090 (International) extension 430. You can also send an email to disastersupport@iosafe.com. The professionals at ioSafe can determine the best actions to take to protect your valuable information. In some cases a self recovery can be performed and provide you with immediate access to your information. In other cases, ioSafe may request that the ioSafe Rugged Portable be returned to the ioSafe factory for data recovery. In any case, contacting ioSafe is the first step.

The general steps for disaster recovery are:

- Email <u>disastersupport@iosafe.com</u> with your serial number, product type and date of purchase.
- 2. If you can not email, call ioSafe Disaster Support Team at 1-888-984-6723 (US & Canada) or 1-530-820-3090 (International) extension 430
- 3. Report disaster event, and obtain return shipping address/instructions
- 4. Follow ioSafe team instructions on proper packaging.
- ioSafe will recover all data which is recoverable according to the terms of the Data Recovery Service Terms and Conditions.
- 6. ioSafe will then place any recovered data on a replacement ioSafe device
- 7 (acafa will altinate manifestional action devites beat an about minimal warm

8.	Once the primary server $/$ computer is repaired or replaced, the original user should restore the primary drive data with the ioSafe backup data

ioSafe No-Hassle™ Warranty

If the ioSafe Rugged Portable breaks during the warranty period, for any reason, we will repair or replace it. Yes, even if you break it on purpose.

The standard term for the warranty is one (1) year from the date of purchase. Three (3) and Five (5) year extended term No-Hassle Warranty services are available upon activation of the Data Recovery Service. See the website or contact <u>customerservice@iosafe.com</u> for help. ioSafe reserves the right to have its representative inspect any product or part to honor any claim, and to receive a purchase receipt or other proof of original purchase before warranty service is performed.

This warranty is limited to the terms stated herein. All expressed and implied warranties including the warranties of merchantability and fitness for a particular purpose are excluded, except as stated above. ioSafe disclaims all liabilities for incidental or consequential damages resulting from the use of this product, or arising out of any breach of this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may have other rights as well, which will vary from state to state.

ioSafe Contact Information

Corporate Headquarters

ioSafe, Inc. 12760 Earhart Avenue Auburn CA 95602

USA Toll Free Phone: 888.98.IOSAFE (984.6723) x400

International Phone: 530.820.3090 x400

USA Toll Free Fax: 888.FAX.IOSAFE International Fax: 530.653.2015

Email: info@iosafe.com

Disaster Support

US Toll Free Phone: 888.98.IOSAFE (984.6723) x430

International Phone: 530. 820.3090 x430

Email: disastersupport@iosafe.com